

Aphids of the Genus *Kakimia* Infesting *Ribes* (Homoptera¹).

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This report deals with seven species of the aphid genus *Kakimia* H. and F.³ which attack currants and gooseberries, one species being here described as new. The following key serves to separate available material to species.

Key to Species

- A. Cornicles at least 4 times hind tarsi in length.
 - B. Sensoria present on antennal IV of alate *muesebecki* n. sp.
 - BB. Sensoria absent on antennal IV of alate
 - C. Rostral IV + V at least 0.17 mm. long.....*ceri*
 - CC. Rostral IV + V less than 0.17 mm. long, *ribe-utahensis*
- AA. Cornicles less than 4 times hind tarsi in length.
 - B. Unguis not exceeding 1.25 times antennal III.
 - C. Sensoria rarely present on antennal IV of alate
 - ribifolii*
 - CC. Sensoria on antennal IV usually exceeding 2 in number
houghtonensis
 - BB. Unguis usually exceeding 1.25 times antennal III.
 - C. Apterera without sensoria on antennals IV and V.
 - cynosbati*
 - CC. Apterera possessing sensoria on antennals IV and V.
thomasi

KAKIMIA CERI G.-P.

Gillette and Palmer, Ann. Ent. Soc. Amer. 26: 354, 1933.

Collections: Specimens from Colorado, taken on native red currant at Rocky Mountain National Park and Nederland, August 23, 1935 (Knowlton); not yet taken in Utah.

Taxonomy: *K. ceri* differs from *K. muesebecki* in lacking sensoria on antennal IV of alates. It differs from *K. ribe-utahensis* in lateral hairs of cauda being slender and pointed at tip.

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³ The writers are indebted to M. A. Palmer, E. O. Essig, C. F. W. Muesebeck, H. B. Mills and L. G. Strom for the loan of berry aphid material.

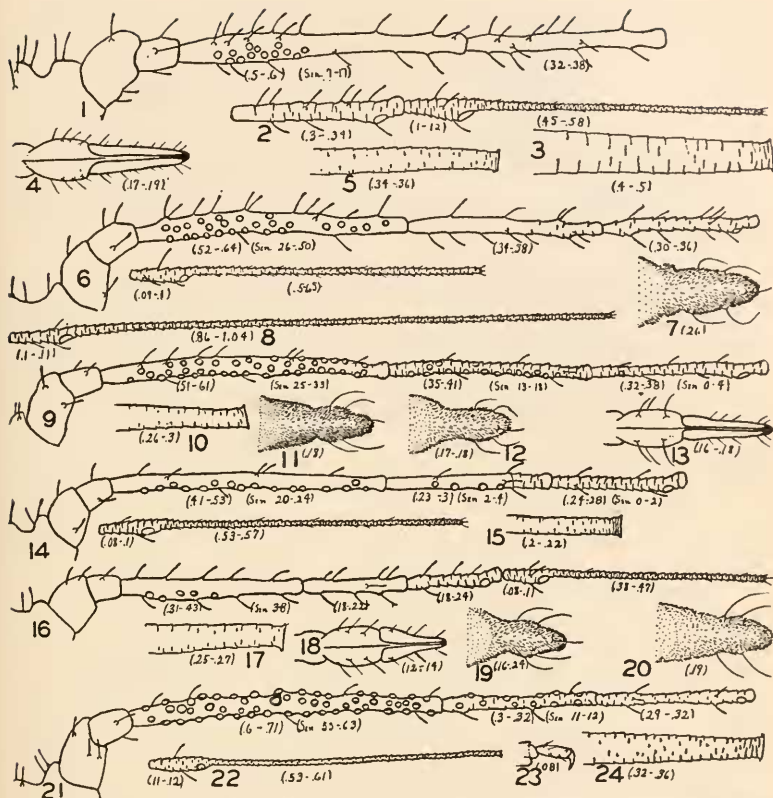


Figure A. *Kakimia ceri* G.-P. Aptera 1-4, 7; alate, 5-6. *K. cynosbati* (Oest.). Alate 8-11, 13. *K. houghtonensis* (Troop). Alate 12, 14-15; aptera 16-19. *K. muesebecki* n. sp. Alate 20-22, 24; aptera 23.

KAKIMIA CYNOSBATI (Oest.)

Oestlund, Geol. and Nat. Hist. Surv. Minn. Bul. 4:81, 1887.

Alate vivipara: Color green; body 1.84 to 1.94 mm. long; antennae 2.45 to 2.66, dusky entire length; hind tibiae 1.64 to 1.76; hind tarsi 0.1; cornicles 0.26 to 0.3, pale; cauda 0.18 mm., pale.

Collections: On wild gooseberry south of Woodruff, Utah, July 5, 1938 (Knowlton); on *Ribes*, Milwaukee, Wisconsin, June 8, 1933 (L. G. Strom); on ornamental gooseberry, Moline, Illinois, May 16, 1931 (Ross-Mohr); and on *Ribes*, Bozeman, Montana, August 30, 1912 (J. R. Parker).

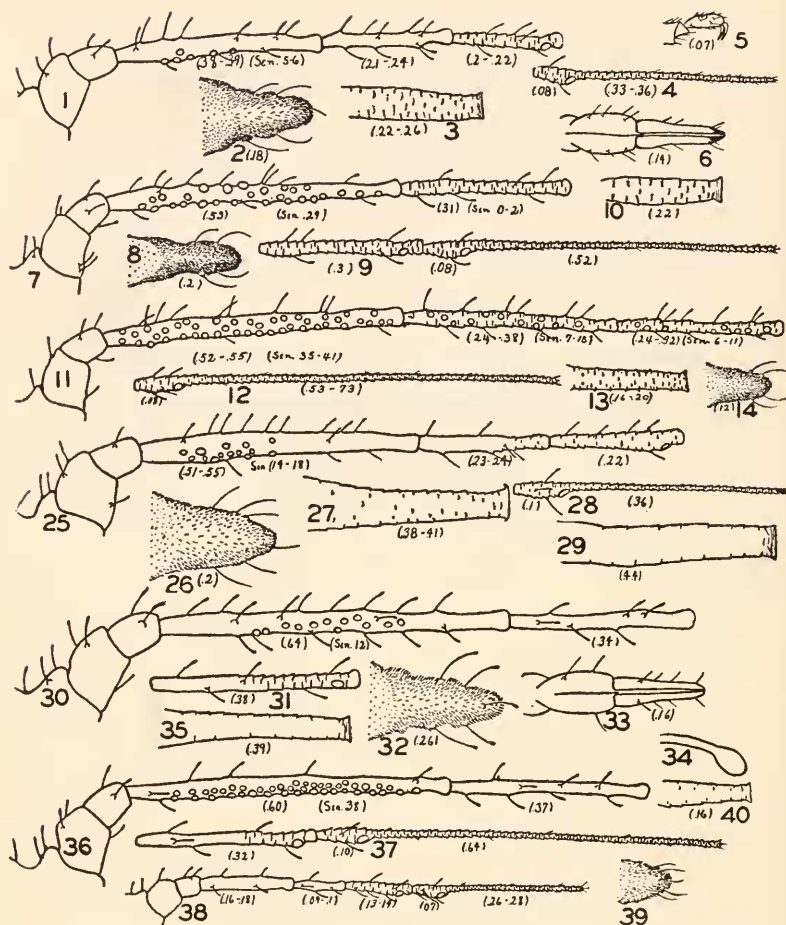


Figure B. *Kakimia ribifolii* (Davidson). Apteran 1-6; alate vivipara 7-10; alate male 11-14. *K. muesebecki* n. sp. Apteran 25-28. *K. ribetahensis* Knlt. Apteran 29-33, 34 enlarged apex of caudal hair; alate vivipara 35-37; ovipara 38-40.

Taxonomy: *K. cynosbati* differs from *K. thomasi* in having fewer secondary sensoria on antennals III, IV and V of alates and aptera.

KAKIMIA HOUGHTONENSIS (Troop).

Troop, Ent. News 17:59, 1906.

Alate vivipara: Body 1.33 to 1.49 mm. long; antennae, 1.76 to 1.88, dusky; rostral IV + V reaching second coxae; hind

tibiae 1.1 to 1.27, distal end dark; hind tarsi, 0.08 to 0.1; cornicles 0.2 to 0.22, pale; cauda 0.17 to 0.18, pale.

Apterous vivipara. Color yellow; body 1.43 to 1.76 mm. long; antennae 1.31 to 1.66, pale to slightly dusky; rostral IV + V exceeding second coxae; hind tibia 0.79 to 0.94; hind tarsi 0.08; cornicles 0.25 to 0.27, pale, lightly imbricated.

Apterous ovipara: Body 1.37 mm. long; antennae 0.79 to 0.32, pale; antennal III, 0.16; IV, 0.1; V, 0.1; VI, 0.06 + 0.25; rostral IV + V, 0.1; hind tibiae 0.53; hind tarsi 0.08; cornicles 0.14 to 0.16, pale; cauda, 0.1 to 0.11, pale.

Collections: Apta extremely abundant on *Ribes grossularia* in Utah at Logan, June 21, 1926 (Knowlton); alates, Dayton, Ohio, May 20, 1925 and males and ovipara, Columbus, Ohio, October 21, 1924 (Knowlton); Milwaukee, Wisconsin, July 2, 1935 (L. G. Strom); Joliet, Montana, July 14, 1915.

Taxonomy: *K. houghtonensis* differs from *K. ribifolii* in having more sensoria on antennal IV.

***Kakimia muesebecki* n. sp.⁴**

Alate vivipara: Body 1.74 mm. long; antennae 2.05 mm., dusky; antennal III, 0.6 to 0.64 mm. long with 55 to 63 tuberculate sensoria; IV, 0.3 to 0.32 with 11 to 12 sensoria; V, 0.29 to 0.32; VI, 0.11 to 0.12 + 0.53 to 0.61; rostral IV + V, 0.16 to 0.17; hind tibiae 1.37; hind tarsi 0.08; cornicles 0.32 to 0.36, dusky; cauda 0.19, dusky.

Apterous vivipara: Body, 1.84 mm. long; antennae 1.64, pale entire length; antennal III, 0.51 to 0.53 with 14 to 18 sensoria; IV, 0.23 to 0.24; V, 0.22; VI, 0.1 + 0.36; rostral IV + V, 0.17; hind tibiae 1.16; hind tarsi 0.07 to 0.08; cornicles 0.38 to 0.41, pale; cauda, 0.2 mm. long.

Collections: Alate and apterous vivipara collected on *Ribes* at Redwood Canyon, CALIFORNIA, April 12, 1916 (W. M. Davidson).

Taxonomy: This species runs to *K. ceri* G.-P. in Gillette and Palmer's key (Annals Ent. Soc. of Amer. 27:160, 1934) from which it differs in having sensoria on antennal IV of alate vivipara and shorter antennals IV and V. This species was apparently collected from near the type locality of *K. ribifolii* (Dvds.) from which species it differs in the alate form having more sensoria on antennals III and IV, longer cornicles and base of antennal VI.

⁴The writers name this species in honor of C. F. W. Muesebeck of the U. S. Bureau of Entomology and Plant Quarantine. Types are returned to the U. S. National Museum.

KAKIMIA RIBE-UTAHENSIS Knt.

Knowlton, Ann. Ent. Soc. Amer. 28: 281, 1935.

Alate vivipara: Antennae 2.3 mm. long; rostrum reaching 3rd coxae; hind tibiae 1.47 mm.; cornicles 0.39, slightly dusky; cauda pale.

Apterous vivipara: Body 2.29 mm. long; hind tibiae 1.47; hind tarsi 0.09; cornicles 0.44; cauda 0.26, pale.

Apterous ovipara: Body 1.5 mm. long; antennae 0.9; hind tibiae swollen, 0.53; hind tarsi 0.09; cornicles 0.16 mm., pale; cauda pale.

Taxonomy: *Kakimia ribe-utahensis* runs to *K. ceri* in Gillette and Palmer's key (Ann. Ent. Soc. Amer. 27:160) from which it differs in having shorter rostral IV + V, more definitely knobbed lateral hairs on cauda, a different seasonal life history, and smaller apterous ovipara.

Collections: Summer vivipara, males and ovipara of *K. ribe-utahensis* were taken at Cedar City, Utah, July 18, 1925, on native black currant (Knowlton).

KAKIMIA RIBIFOLII (Dvds.).

Davidson, Jr. Econ. Ent. 10:294, 1917.

Alate vivipara: Body 1.37 mm. long; antennae 1.98, dusky; cornicles dark, imbrications minutely setulose; cauda dark, 0.2 mm. long.

Apterous vivipara: Body 1.39 to 2.05 mm. long; antennae 1.39 to 1.45, dusky; hind tibiae 0.98 to 1.02; hind tarsi 0.07; rostral IV + V, 0.14 mm.; cornicles and cauda dark.

Alate male: Body 1.55 mm. long; antennae 1.84, dark; antennal III, 0.53 mm. long with 35 sensoria; IV, 0.24 with 7 sensoria; VI, 0.08 + 0.55; cauda 0.1, dark; other characters as in alate vivipara.

Collections: Two slides lent by Professor E. O. Essig were collected on *Ribes* at Berkeley, California, March 18, 1937 (W. Sampson); 3 slides from the type locality were secured through C. F. W. Muesebeck from the U. S. National Museum, curling leaves of *Ribes glutinosum* at Redwood Canyon near Walnut Creek, California, May 7, 1914 and March 26, 1915; also a metatype slide, Redwood Canyon May 7, 1914 (W. M. Davidson), was lent by Professor M. A. Palmer.

Taxonomy: *K. ribifolii* (Dvds.) is close to *K. houghtonensis* (Troop) but differs in having fewer sensoria on antennal IV of alate and shorter unguis in aptera.

KAKIMA THOMASI H.-F.

Hottes and Frison, Ill. Nat. Hist. Surv. Bul. 19: 343, 1931.

Described from specimens collected on *Ribes* at Rock Island, Illinois, July 9, 1929 (Frison-Hottes).